

AMENDMENTS TO THE CLAIMS

Please enter the following amendments without prejudice or disclaimer.

Please cancel claims 6, 9-11, and 15 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims:

Claim 1 (currently amended): A surface-treated plastic slide comprising a plastic slide and a coating on the plastic slide for immobilizing thereon ~~[[thereto]]~~ proteins, peptides or small molecules, ~~comprising a plastic slide and a coating as a spacer on the plastic slide wherein~~ said coating comprises a polyfunctional aldehyde coupled to said plastic slide, a compound providing at least one NH₂ group which is coupled to said polyfunctional aldehyde, and a polyfunctional epoxide compound comprising at least one epoxy group for coupling to said NH₂ group and at least one epoxy group for coupling to said proteins, peptides or small molecules.

Claim 2 (original): The surface-treated plastic slide as claimed in claim 1, wherein the plastic slide is formed of a material, which is a polycarbonate, or a homopolymer or copolymer that is made of one or more monomers selected from the group consisting of ethylene, haloethylene, propylene, halopropylene, acrylate, methacrylate, butadiene, acrylonitrile, norbornene and styrene.

Claim 3 (currently amended): The surface-treated plastic slide as claimed in claim ~~[[1]]~~ 2, wherein the plastic slide is formed of a polymer of styrene.

Claim 4 (original): The surface-treated plastic slide as claimed in claim 1, wherein the plastic slide has at least one cavity chamber.

Claim 5 (currently amended): The surface-treated plastic slide as claimed in claim 4, wherein the plastic slide has two depth of the cavity chambers ~~[[may be]]~~ having the same or different depth ranging , and ranges from less than 0.03 mm to 0.5 mm.

Claim 6 (canceled)

Claim 7 (currently amended): The surface-treated plastic slide as claimed in claim ~~[[6]]~~ 1, wherein the polyfunctional aldehyde is glutaldehyde.

Claim 8 (currently amended): The surface-treated plastic slide as claimed in claim 1, wherein the compound providing at least one NH_2 group ~~group(s) providing precursor~~ is NH_4OH .

Claim 9 (canceled)

Claim 10 (canceled)

Claim 11 (canceled)

Claim 12 (currently amended): The surface-treated plastic slide as claimed in claim ~~[[10]]~~ 1, wherein the epoxy group(s) ~~at the other end of the polyfunctional epoxide~~ for coupling to said proteins, peptides or small molecules can react with ~~[[the]]~~ their free hydroxyl, sulfhydryl or amino groups ~~of the proteins, peptides or small molecules~~.

Claim 13 (currently amended): The surface-treated plastic slide as claimed in claim ~~[[10]]~~ 1, wherein the polyfunctional epoxide compound contains a long chemical chain of 6 to 24 carbon atoms.

Claim 14 (original): The surface-treated plastic slide as claimed in claim 1, wherein the proteins, peptides or small molecules are homogeneous or heterogeneous.

Claim 15 (canceled)

Claim 16 (currently amended): The surface-treated polystyrene slide ~~as claimed in claim 15~~ comprising a polystyrene slide and a coating on the polystyrene slide for immobilizing

thereon oligonucleotides or polynucleotides, wherein the coating is formed by applying ~~a reagent comprising to said polystyrene slide~~ a NH_4^+ group-free buffer containing a positive charges-providing polymers under polymer at an alkaline condition.

Claim 17 (original): The surface-treated polystyrene slide as claimed in claim 16, wherein the positive charges-providing polymer is polylysine.

Claim 18 (original): The surface-treated polystyrene slide as claimed in claim 16, wherein the NH_4^+ group-free buffer is selected from the group consisting of a carbonate, phosphate and citrate buffer.

Claim 19 (original): The surface-treated polystyrene slide as claimed in claim 16, wherein the alkaline condition is in the range of pH 9 to 11.

Claim 20 (currently amended): The surface-treated polystyrene slide as claimed in claim ~~[[15]]~~ 16, wherein the polystyrene slide has at least one cavity chamber.

Claim 21 (currently amended): The surface-treated polystyrene slide as claimed in claim 20, wherein the ~~depth of the polystyrene slide has two~~ cavity chambers ~~[[may be]]~~ having the same or different depth ranging, ~~and ranges from less than~~ 0.03 mm to 0.5 mm.